



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 5**  
**9311 GROH ROAD**  
**GROSSE ILE, MI 48138**

**MEMORANDUM**

**SUBJECT:** Review of Background Sampling Areas for the South Dayton Dump and Landfill Site

**FROM:** Keith Fusinski, PhD Toxicologist US EPA  
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**TO:** Leslie Patterson, Remedial Project Manager, US EPA  
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**DATE:** 3/1/2017

I have reviewed the Background Comparisons Section of the RIFS for the SSD&L site, the OEPA Use of Background for Remedial Response Sites Technical Decision document and the comments from OEPA regarding background on February 27<sup>th</sup>.

I have a few concerns;

- 1.) The current background sampling plan includes collecting samples from the road sides of East River Rd and Dryden Rd and along an unnamed gravel road on the northwest side of the river, opposite the site. OEPA guidance states that background samples should not be collected from "roads or road sides". I concur with OEPA on this. If these sampling locations are used, they must only be compared to site sampling locations along a roadside. It would be inappropriate to compare these samples to site samples collected from any other location. My suggestion is to not use road or road side areas as background sampling locations if it can be avoided.
- 2.) The area chosen for background soil sampling to the southwest of the site is in the 100 year flood plain and downstream of the site. Flooding of the area may have relocated soil contamination from the site onto this parcel. As such, this area is not recommended to be used as a background sampling location.
- 3.) Background contamination can be both naturally occurring or anthropogenic (man-made). The goal of background sampling is to ensure that the responsible parties clean up their own contamination, and not hold them responsible for anyone else's mess. The locations for background samples are normally chosen

prior to sampling, based upon the locations being upwind, upstream, upgradient of the site itself and therefore not expected to be impacted by the site.

Being in an industrial/commercial area it is safe to assume that industrial contaminants can be found throughout the area at various concentrations. OEPA guidance recommends that potential background samples be analyzed for contaminants found at the site, and if these contaminants are found in the background sample, then the sample itself should not be considered background. This means that even if the background sampling location is miles upwind/upstream/upgradient from the site, and site-related analytes are found there, then the location is considered impacted by the site, and is not background. This also means that responsible parties may be held responsible for contamination caused by other parties that is severable from site contamination. I find this inappropriate.

My suggestions are to retain the background sampling locations across the river to the northwest (near the track), to the east, and the floodplain area along the river to the northeast (see green circles in following image). The roadside samples are at best of limited value for comparison to roadside site samples only. The parcel to the southwest should be discarded unless it can be shown that it has not flooded since the beginning of dumping at the site.

